The newly presented amendments do not add any new matter, and are otherwise intended as clarifications per the Examiner's recent feedback, or intended as correction of an inadvertent typographical error, and are not intended to result in any other substantive effect with respect to scope. In accordance with 37 C.F.R. §1.121, a claim listing including the status and text of all claims as currently presented appears below.

LISTING OF CURRENTLY PENDING CLAIMS

1. (CURRENTLY AMENDED) An electronics assembly, comprising:

a condition-responsive device configured to sense information about at least one physical parameter associated with its surrounding environment;

an RF source connected to said condition-responsive device for exciting said condition-responsive device at selected resonant frequency levels such that said condition-responsive device generates an output signal in response thereto;

an antenna for receiving said output signal from said condition-responsive device and for transmitting a radio frequency (RF) signal indicating said at least one physical parameter; and

at least one switching element configured to selectively control the effective transmission of said RF signal,

whereby one or more data types may be selectively transmitted from the electronic assembly.

2. (ORIGINAL) An electronics assembly as in claim 1, wherein said condition-responsive device comprises an acoustic wave device including a plurality of acoustic wave resonators.

3. (ORIGINAL) An electronics assembly as in claim 2, wherein said acoustic wave resonators are surface acoustic wave (SAW) resonators.

4. (ORIGINAL) An electronics assembly as in claim 2, wherein said acoustic wave device comprises a one-port or a two-port resonator-based sensor.

5. (ORIGINAL) An electronics assembly as in claim 1, wherein said condition-responsive device comprises a delay line sensor.

6. (CURRENTLY AMENDED) An electronics assembly as in claim [1] 2, wherein said plurality of acoustic wave resonators function to sense information corresponding to the temperature and pressure within its surrounding environment.

7. (ORIGINAL) An electronics assembly as in claim 1, further comprising a power source connected to said RF source.

8. (ORIGINAL) An electronics assembly as in claim 1, further comprising a microcontroller connected to and configured for controlling said at least one switching element.

9. (ORIGINAL) An electronics assembly as in claim 1, wherein said at least one switching element is provided in series with said condition-responsive device and said RF source and is configured to selectively control the connection between said RF source and said condition-responsive device.

10. (ORIGINAL) An electronics assembly as in claim 9, wherein the RF output signals transmitted by said antenna include modulated data effected by selective actuation of said at least one switching element.

11. (ORIGINAL) An electronics assembly as in claim 9, wherein said modulated data includes information corresponding to at least one parameter selected from the group consisting of tread wear, revolution count, vehicle speed, sidewall deflection level, and tire identification information.

12. (ORIGINAL) An electronics assembly as in claim 9, wherein said at least one switching element comprises a field-effect transistor (FET).

13. (ORIGINAL) An electronics assembly as in claim 9, wherein said at least one switching element comprises a radio frequency identification (RFID) transponder.

14. (ORIGINAL) An electronics assembly as in claim 13, wherein the operating frequency of said RFID transponder and said selected resonant frequency levels at which said condition-responsive device are excited are all within a same predetermined frequency band.

15. (ORIGINAL) An electronics assembly as in claim 1, wherein said at least one switching element is provided in parallel with said condition-responsive device and is

configured to selectively control the effective operation of said condition-responsive device, thus corresponding to selectively cloaking said condition-responsive device.

16. (ORIGINAL) An electronics assembly as in claim 15, wherein said at least one switching element comprises a field-effect transistor (FET).

17. (ORIGINAL) An electronics assembly as in claim 15, wherein said at least one switching element comprises a radio frequency identification (RFID) transponder.

18. (ORIGINAL) An electronics assembly as in claim 1, wherein said electronics assembly is integrated with and configured for operation in a pneumatic tire structure or wheel assembly.

19. (ORIGINAL) An electronics assembly, comprising:

a condition-responsive device capable of sensing various changes in its surrounding environment, said condition-responsive device characterized by first and second electrical connection points thereto;

an RF source configured for respective connection to said first and second connection points of said condition-responsive device for exciting said condition-responsive device in a given frequency band;

a first switching element coupled between said condition-responsive device and said RF source for selectively controlling the connection between said RF source and a selected connection point of said condition-responsive device; and

a second switching element coupled with said condition-responsive device for selectively controlling the effective operation of said condition-responsive device.

20. (ORIGINAL) An electronics assembly as in claim 19, wherein said condition-responsive device comprises an acoustic wave device including a plurality of acoustic wave resonators.

21. (ORIGINAL) An electronics assembly as in claim 20, wherein said acoustic wave resonators are surface acoustic wave (SAW) resonators.

22. (ORIGINAL) An electronics assembly as in claim 19, wherein said condition-responsive device comprises a delay-line sensor.

23. (ORIGINAL) An electronics assembly as in claim 19, wherein said plurality of acoustic wave resonators function to sense information corresponding to the temperature and pressure within its surrounding environment.

24. (ORIGINAL) An electronics assembly as in claim 19, further comprising a power source connected to said RF source.

25. (ORIGINAL) An electronics assembly as in claim 19, further comprising a microcontroller connected to and configured for controlling said first and second switching elements.

26. (ORIGINAL) An electronics assembly as in claim 19, wherein the RF output signals transmitted by said antenna include modulated data effected by selective actuation of said first switching element.

27. (ORIGINAL) An electronics assembly as in claim 26, wherein said modulated data includes information corresponding to at least one parameter selected from the group consisting of tread wear, revolution count, vehicle speed, sidewall deflection level, forces in the tire, and tire identification information.

28. (ORIGINAL) An electronics assembly as in claim 19, wherein selected of said switching elements are field-effect transistors (FETs).

29. (ORIGINAL) An electronics assembly as in claim 19, wherein selected of said switching elements comprise a radio frequency identification (RFID) transponder.

30. (ORIGINAL) An electronics assembly as in claim 29, wherein the operating frequency of said RFID transponder is within said given frequency band for exciting said condition-responsive device.

31. (ORIGINAL) An electronics assembly as in claim 19, further comprising first and second antenna wires respectively connected to said first and second electrical connection points of said condition-responsive device, wherein said first and second antenna wires function together as a dipole antenna for said electronics assembly.

32. (ORIGINAL) An electronics assembly as in claim 19, wherein said electronics assembly is integrated with and configured for operation in a pneumatic tire structure or vehicle wheel.

33. (CURRENTLY AMENDED) A tire assembly with integrated sensing features designed to measure and transmit information relating to preselected tire conditions, said tire assembly comprising:

a pneumatic tire structure;

an acoustic wave device configured to sense information about at least one physical parameter associated with said pneumatic tire structure;

an RF source connected to said acoustic wave device for exciting said acoustic wave device at selected resonant frequency levels such that said acoustic wave device generates an output signal in response thereto;

an antenna for receiving said output signal from said acoustic wave device and for transmitting a radio frequency (RF) signal indicating said at least one physical parameter; and

a controllable switching element coupled between said acoustic wave device and said RF source to selectively control the connection between said acoustic wave device and said RF source,

whereby data indicative of at least a second physical parameter associated with said pneumatic tire structure may be selectively transmitted.

34. (ORIGINAL) A tire assembly as in claim 33, wherein said acoustic wave device comprises a plurality of surface acoustic wave (SAW) resonators configured to provide data corresponding to the temperature and pressure within said pneumatic tire structure.

35. (ORIGINAL) A tire assembly as in claim 33, wherein said controllable switching element comprises an RFID transponder.

36. (ORIGINAL) A tire assembly as in claim 35, wherein the operating frequency of said RFID transponder and said selected resonant frequency levels at which said condition-responsive device are excited are all within a same predetermined frequency band.

37. (ORIGINAL) A tire assembly as in claim 33, wherein said controllable switching element comprises a transistor.

38. (ORIGINAL) A tire assembly as in claim 33, further comprising a microcontroller connected to and configured for controlling said transistor.

39. (ORIGINAL) A tire assembly as in claim 33, further comprising a power source connected to selected other elements of said tire assembly.